

Wireless Indoor Intelligent Ceiling Mount PIR Detector

Installation Manual

1. Brief Introduction

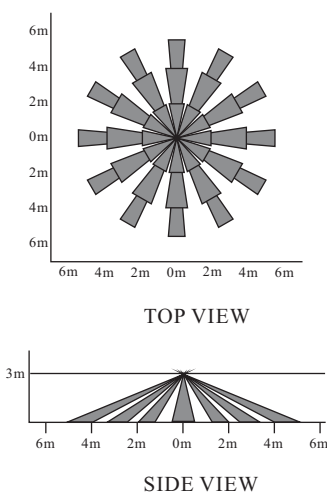
This is an indoor ceiling mount dual-element pir detector with mini power consumption. It is with few false alarm and missing alarm. It adopts bi-direction temperature compensation which enables its effective detection in a wide temperature range; it also adopts unique pets parameter calculation technology which can avoid false alarm from pets up to 10kg. It is with remarkable functions in anti-hot air, window curtain waving etc. It is very stable in detection with 2 grades of sensitivities. Its low power consumption design can support battery life up to 2 years. Its functions and stability is sure to be much better than those detectors available in the market with similar prices!

2. Main functions

- Super low power consumption design
- 2-grade sensitivity detection
- Digital pet immunity up to 10kg
- Bi-direction temperature compensation
- High capacity battery(Factory battery can support more than 24 months)
- EDS/anti electric strike/Anti mobile interference
- Anti white light interference
- 360°Fresnel lens

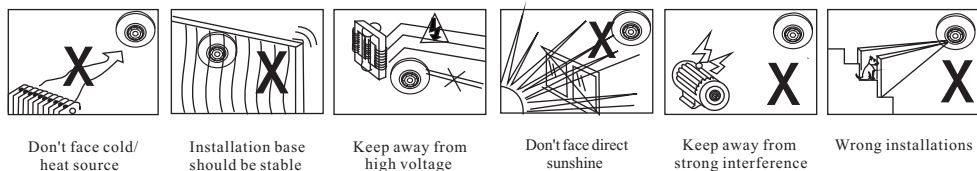
3. Technical parameter

Power:	1.5V*2 AA Alkaline battery
Current:	20uA (stand by) 14mA (alarm)
Installation height:	2.4m.-3.6m
Detection range:	φ8m 360°
Temperature compensation:	digital compensation
Pulse:	2/3 for option
Sensitivity:	high/low for option
Anti EMI:	0.1-500MHz/30V/m
Anti white light:	>10000LUX
Alarm data:	EV1527/PT2262 for option
Alarm period:	2s
Alarm cycle:	4 mins(USE mode)
Wireless distance:	over 200m (open area)
Wireless frequencies:	315/433/868MHz
Operation temperature:	-10°C/+55°C
Detection speed:	0.2m/s - 3.5m/s
Fire proof:	flame retardant ABS
Pet immunity:	10Kg
Size :	diameter 115mm*32



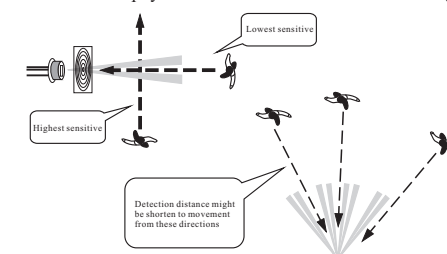
4. Installation guide

Select a best installation suitable for PIR detection and fasten ceiling mount detector on proper position, keep away from door, window, running machine and heat.

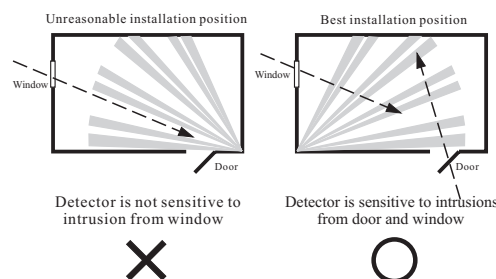


On installation angle (For reference)

Detector is with physical difference to different intrusion angles

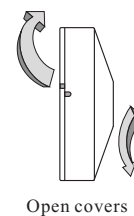


On installation position (For reference)

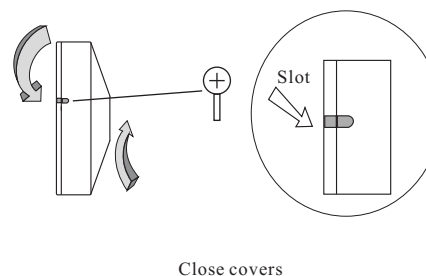


5. Installation and internal parts

Take the upper and lower covers by 2 different hands and press them slightly and then rotate the upper and lower covers anticlockwise to open the detector.

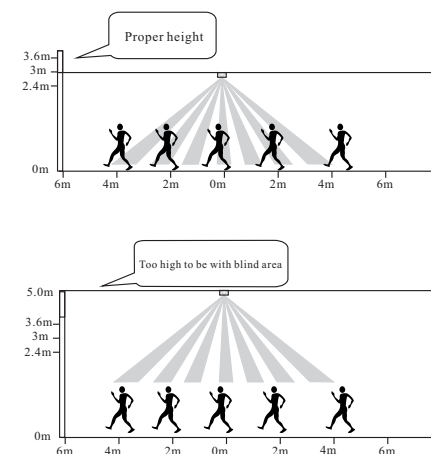


Align the indentation of upper and lower covers and rotate the covers clockwise to fasten the detector

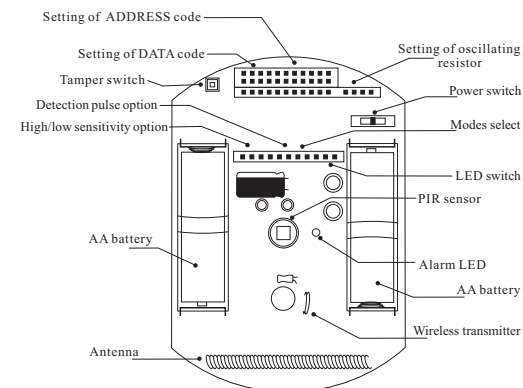


On installation height

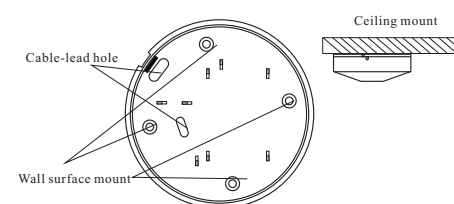
Recommend installation height is 2.4-3.6m



Internal parts



Ceiling mount figure



6. Various setting and walking test

TEST/USE modes option

When jumper is set to TEST mode, detector can be triggered whenever there is intrusion

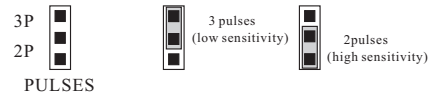
When jumper is set to USE mode, 2nd alarm will be triggered 4 minutes after first trigger (this design is used for battery energy saving, recommend to use)



Setting on detector pulse (PULSE)

When jumper is set to pulse 3, detector is in low sensitivity and alarm can be triggered when more than 3 pulses are detected

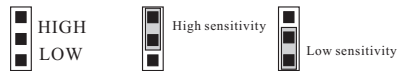
When jumper is set to pulse 2, detector is in high sensitivity and alarm can be triggered when 2 pulses are detected



Setting on sensitivity (SEN)

When jumper is set to high sensitivity, detector is in high sensitivity.

When jumper is set to low sensitivity, detector is in low sensitivity.



SENSITIVITY

Notes: when pulse and sensitivity are combined for setting, 4 detection grades can be reached to be suitable for different installation operation.

Alarm LED control (LED)

When jumper is set to OFF mode, even detector is triggered, LED will not turn on. This is just for concealment and battery energy-saving. (recommended)



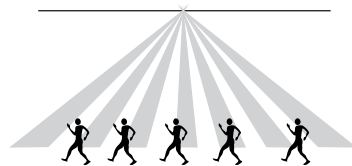
Walking test

Set detector to TEST mode, turn on POWER and LED and then close the covers till LED turns off. Make horizontal movement in the detection area and check PIR detection status from LED (when alarm triggered, LED will flash for 2 times). This test can avoid blind area to PIR. And when intruder makes horizontal movement to detector, sensitivity is the highest.

When detector is installed in different environments, please adjust the PIR sensitivity and detection pulse in order to get best detection. When pulse is set to 2, detector is with high sensitivity; when pulse is set to 3, detector is with low sensitivity. Usually detector is set to 2 pulse.

When test is finished, you can turn off alarm led or keep it on as you like.

Note: strongly suggested settings: "USE" mode and "LED off" in order to last battery life.



E V1527 form setting

Setting on oscillating resistor

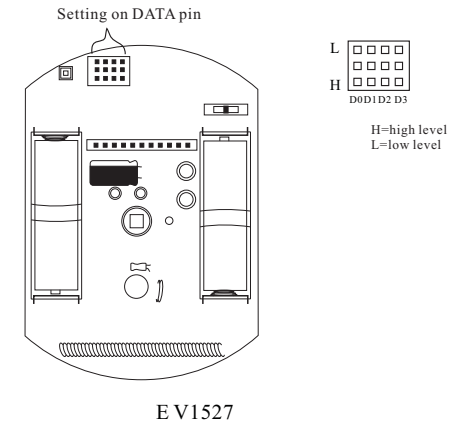
When EV1527 is used, oscillating resistance is set to 330k. User can make modification according to self needs.

Setting on DATA pin

Proper coding data can be obtained by setting on DATA SET for control panel recognition: D3\D2\D1\D0

Setting on ADDRESS codes

Chip is with built-in 1048576 codes, user doesn't need to make change.



8. On pet immunity

It is a high index to detector: to avoid false alarm caused by small animals. Our company adopts 2 different ways on pet immunity:

1. Physical way: special processing on Fresnel's lens detection area to reduce false alarm caused by small animals.
 2. Adopts software analysis way: mainly process on detector signals parameter and then make comparison with the data sheet in the microchip in detector, then it will judge whether movement is from human being or small animals.
- So we can know that pet immunity on pir detector is relative. This kind of relativity includes 2 points:

1. False alarm to pets is relative. There is much lower false alarm comparing with those detectors which is not with pet immunity, at the same time, it is with limitation to pets quantity and size.
2. There is requirement to installation position. Random installation can't avoid false alarm from pets. During installation, please read manuals very carefully.

9. Explanation on different alarm messages

Tamper/reset:

When front cover is moved, signal of "tamper switch open" will be sent out; when front cover is recovered, tamper switch stops send out signal.

PIR intrusion alarm:

When detector is in alarm status, alarm signal will be transmitted immediately.

Low voltage alarm:

A special battery signal, when battery voltage is not enough, it will send out low voltage alarm. (When battery voltage is low to 2.2V)

7. Wireless DATA forms setting

PT2262 form

Setting on oscillating resistor

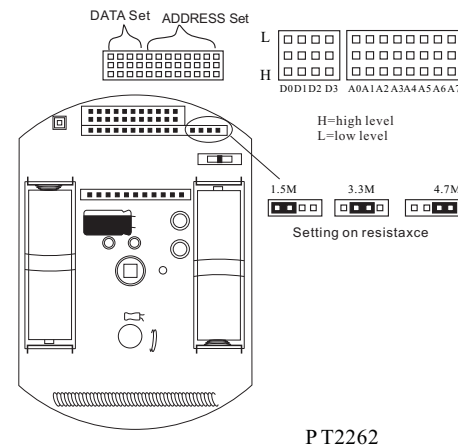
Setting on oscillating resistance on coding chip can make detector be compatible with other control panels in PT2262 form. Please refer to below diagram: We have 3 modes: 4.7M, 3.3M, 1.5M

Setting on DATA pin

Proper coding data can be obtained by setting on DATA SET for control panel recognition: D3\D2\D1\D0

Setting on ADDRESS codes

Different address codes can be obtained by setting on 8 different pins in order that control panel can recognize different zones



P T2262